

Design Information

	Htg	Clg		Infiltration
Outside db (°F)	4	89	Method	Blower door
Inside db (°F)	70	75	Shielding / stories	3 (partial) / 2
Design TD (°F)	67	14	Pressure / AVF	50 Pa / 2500 cfm
Daily range	-	M		
Inside humidity (%)	30	50		
Moisture difference (gr/lb)	28	29		

HEATING EQUIPMENT

Make	n/a
Trade	n/a
Model	n/a
AHRI ref.	n/a
Efficiency	n/a
Heating input	
Heating output	0 Btuh
Temperature rise	0 °F
Actual air flow	0 cfm
Air flow factor	0 cfm/Btuh
Static pressure	0 in H2O
Space thermostat	n/a

COOLING EQUIPMENT

Make	n/a
Trade	n/a
Cond	n/a
Coil	n/a
AHRI ref.	n/a
Efficiency	n/a
Sensible cooling	0 Btuh
Latent cooling	0 Btuh
Total cooling	0 Btuh
Actual air flow	0 cfm
Air flow factor	0 cfm/Btuh
Static pressure	0 in H2O
Load sensible heat ratio	0

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Ductless	1040	18140	5916	278	278
Ducted system	2464	28454	12352	581	581
Entyre house	3504	46594	18267	860	860
Other equip loads		4994	0		
Equip. @ 0.94 RSM			17153		
Latent cooling			3217		
TOTALS	3504	51588	20370	860	860

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



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Daily range	-	M		
Inside humidity (%)	30	50		
Moisture difference (gr/lb)	28	29		

HEATING EQUIPMENT

Make	
Trade	
Model	
AHRI ref	
Efficiency	80 AFUE
Heating input	0 Btuh
Heating output	0 Btuh
Temperature rise	0 °F
Actual air flow	581 cfm
Air flow factor	0.020 cfm/Btuh
Static pressure	0 in H2O
Space thermostat	

COOLING EQUIPMENT

Make	
Trade	
Cond	
Coil	
AHRI ref	
Efficiency	0 SEER
Sensible cooling	0 Btuh
Latent cooling	0 Btuh
Total cooling	0 Btuh
Actual air flow	581 cfm
Air flow factor	0.047 cfm/Btuh
Static pressure	0 in H2O
Load sensible heat ratio	0.85

ROOM NAME	Area (ft ²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Cbsmt	944	7770	802	159	38
Ecrawl	240	0	0	0	0
Fireplace room	240	5432	3383	111	159
TV room	266	3190	2448	65	115
Kitchen	264	3167	2041	65	96
Bath	63	897	211	18	10
Office	154	3303	1390	67	65
Dining	180	3392	1534	69	72
Entry	114	1302	542	27	26

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Ducted system	2464	28454	12352	581	581
Other equip loads		2802	0		
Equip. @ 0.94 RSM			11598		
Latent cooling			2156		
TOTALS	2464	31256	13754	581	581

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Daily range	-	M		
Inside humidity (%)	30	50		
Moisture difference (gr/lb)	28	29		

HEATING EQUIPMENT

Make	
Trade	
Model	
AHRI ref	
Efficiency	80 AFUE
Heating input	0 Btuh
Heating output	0 Btuh
Temperature rise	0 °F
Actual air flow	278 cfm
Air flow factor	0.015 cfm/Btuh
Static pressure	0 in H2O
Space thermostat	

COOLING EQUIPMENT

Make	
Trade	
Cond	
Coil	
AHRI ref	
Efficiency	0 SEER
Sensible cooling	0 Btuh
Latent cooling	0 Btuh
Total cooling	0 Btuh
Actual air flow	278 cfm
Air flow factor	0.047 cfm/Btuh
Static pressure	0 in H2O
Load sensible heat ratio	0.85

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Bedroom 2	158	4275	1540	66	72
Bedroom 1	305	4878	1409	75	66
Bath 2	64	0	0	0	0
Half bath	36	0	0	0	0
Master bed	421	8986	2966	138	140
Stairs/hallway	57	0	0	0	0
Ductless	1040	18140	5916	278	278
Other equip loads		2191	0		
Equip. @ 0.94 RSM			5555		
Latent cooling			1061		
TOTALS	1040	20331	6615	278	278

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Design Information

Weather: Wilkes-Barre Scranton Intl AP, PA, US

Winter Design Conditions

Outside db	4 °F
Inside db	70 °F
Design TD	67 °F

Summer Design Conditions

Outside db	89 °F
Inside db	75 °F
Design TD	14 °F
Daily range	M
Relative humidity	50 %
Moisture difference	29 gr/lb

Heating Summary

Structure	46594 Btuh
Ducts	0 Btuh
Central vent (0 cfm)	0 Btuh
Humidification	4994 Btuh
Piping	0 Btuh
Equipment load	51588 Btuh

Sensible Cooling Equipment Load Sizing

Structure	18267 Btuh
Ducts	0 Btuh
Central vent (0 cfm)	0 Btuh
Blower	0 Btuh
Use manufacturer's data	n
Rate/swing multiplier	0.94
Equipment sensible load	17153 Btuh

Infiltration

Method	Blower door
Shielding / stories	3 (partial) / 2
Pressure / AVF	50 Pa / 2500 cfm

Latent Cooling Equipment Load Sizing

Structure	3217 Btuh
Ducts	0 Btuh
Central vent (0 cfm)	0 Btuh
Equipment latent load	3217 Btuh

	Heating	Cooling
Area (ft ²)	3504	3504
Volume (ft ³)	21608	21608
Air changes/hour	0.74	0.36
Equiv. AVF (cfm)	268	128

Equipment total load	20370 Btuh
Req. total capacity at 0.70 SHR	2.0 ton

Heating Equipment Summary

Make	n/a
Trade	n/a
Model	n/a
AHRI ref	n/a
Efficiency	n/a
Heating input	
Heating output	0 Btuh
Temperature rise	0 °F
Actual air flow	0 cfm
Air flow factor	0 cfm/Btuh
Static pressure	0 in H2O
Space thermostat	n/a

Cooling Equipment Summary

Make	n/a
Trade	n/a
Cond	n/a
Coil	n/a
AHRI ref	n/a
Efficiency	n/a
Sensible cooling	0 Btuh
Latent cooling	0 Btuh
Total cooling	0 Btuh
Actual air flow	0 cfm
Air flow factor	0 cfm/Btuh
Static pressure	0 in H2O
Load sensible heat ratio	0

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Design Information

Weather: Wilkes-Barre Scranton Intl AP, PA, US

Winter Design Conditions

Outside db	4 °F
Inside db	70 °F
Design TD	67 °F

Summer Design Conditions

Outside db	89 °F
Inside db	75 °F
Design TD	14 °F
Daily range	M
Relative humidity	50 %
Moisture difference	29 gr/lb

Heating Summary

Structure	28454 Btuh
Ducts	0 Btuh
Central vent (0 cfm)	0 Btuh
Humidification	2802 Btuh
Piping	0 Btuh
Equipment load	31256 Btuh

Sensible Cooling Equipment Load Sizing

Structure	12352 Btuh
Ducts	0 Btuh
Central vent (0 cfm)	0 Btuh
Blower	0 Btuh
Use manufacturer's data	n
Rate/swing multiplier	0.94
Equipment sensible load	11598 Btuh

Infiltration

Method	Blower door
Shielding / stories	3 (partial) / 2
Pressure / AVF	50 Pa / 2500 cfm

	Heating	Cooling
Area (ft ²)	2464	2464
Volume (ft ³)	13184	13184
Air changes/hour	0.68	0.33
Equiv. AVF (cfm)	150	72

Latent Cooling Equipment Load Sizing

Structure	2156 Btuh
Ducts	0 Btuh
Central vent (0 cfm)	0 Btuh
Equipment latent load	2156 Btuh
Equipment total load	13754 Btuh
Req. total capacity at 0.70 SHR	1.4 ton

Heating Equipment Summary

Make	
Trade	
Model	
AHRI ref	
Efficiency	80 AFUE
Heating input	0 Btuh
Heating output	0 Btuh
Temperature rise	0 °F
Actual air flow	581 cfm
Air flow factor	0.020 cfm/Btuh
Static pressure	0 in H2O
Space thermostat	

Cooling Equipment Summary

Make	
Trade	
Cond	
Coil	
AHRI ref	
Efficiency	0 SEER
Sensible cooling	0 Btuh
Latent cooling	0 Btuh
Total cooling	0 Btuh
Actual air flow	581 cfm
Air flow factor	0.047 cfm/Btuh
Static pressure	0 in H2O
Load sensible heat ratio	0.85

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Design Information

Weather: Wilkes-Barre Scranton Intl AP, PA, US

Winter Design Conditions

Outside db	4 °F
Inside db	70 °F
Design TD	67 °F

Summer Design Conditions

Outside db	89 °F
Inside db	75 °F
Design TD	14 °F
Daily range	M
Relative humidity	50 %
Moisture difference	29 gr/lb

Heating Summary

Structure	18140 Btuh
Ducts	0 Btuh
Central vent (0 cfm)	0 Btuh
Humidification	2191 Btuh
Piping	0 Btuh
Equipment load	20331 Btuh

Sensible Cooling Equipment Load Sizing

Structure	5916 Btuh
Ducts	0 Btuh
Central vent (0 cfm)	0 Btuh
Blower	0 Btuh
Use manufacturer's data	n
Rate/swing multiplier	0.94
Equipment sensible load	5555 Btuh

Infiltration

Method	Blower door
Shielding / stories	3 (partial) / 2
Pressure / AVF	50 Pa / 2500 cfm

Latent Cooling Equipment Load Sizing

Structure	1061 Btuh
Ducts	0 Btuh
Central vent (0 cfm)	0 Btuh
Equipment latent load	1061 Btuh
Equipment total load	6615 Btuh
Req. total capacity at 0.70 SHR	0.7 ton

	Heating	Cooling
Area (ft ²)	1040	1040
Volume (ft ³)	8424	8424
Air changes/hour	0.84	0.40
Equiv. AVF (cfm)	118	56

Heating Equipment Summary

Make	
Trade	
Model	
AHRI ref	
Efficiency	80 AFUE
Heating input	0 Btuh
Heating output	0 Btuh
Temperature rise	0 °F
Actual air flow	278 cfm
Air flow factor	0.015 cfm/Btuh
Static pressure	0 in H2O
Space thermostat	

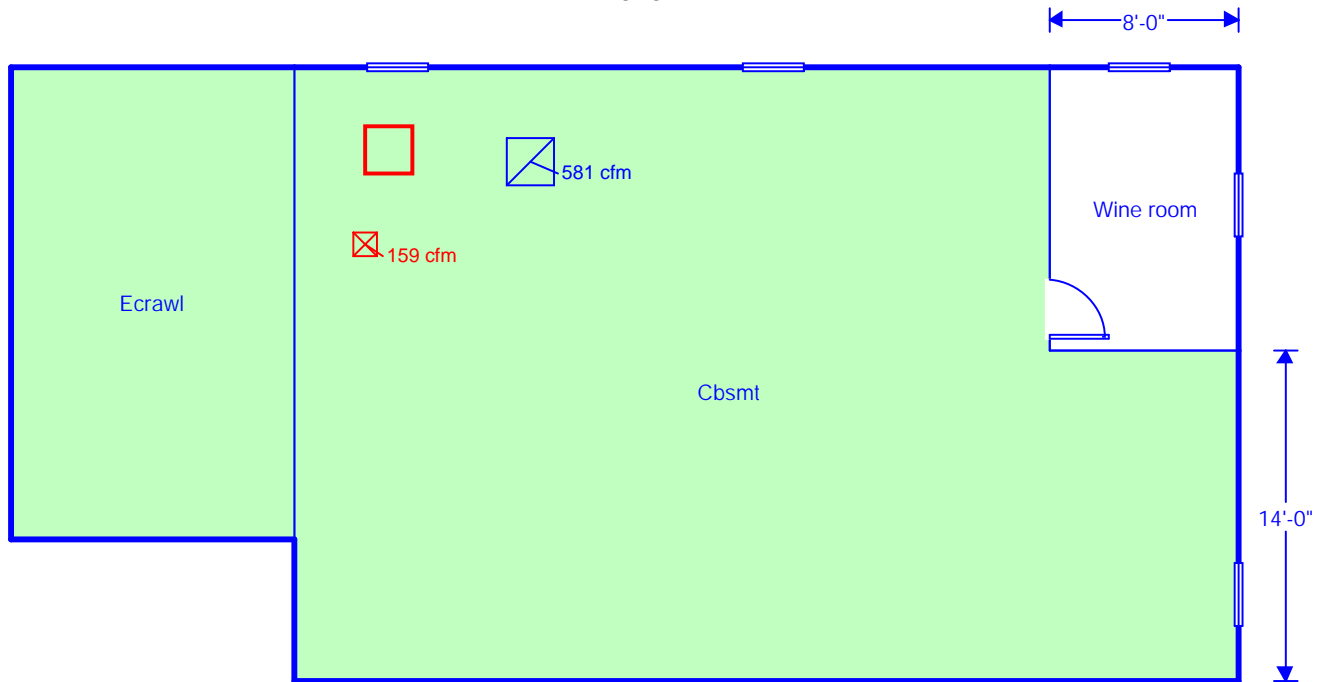
Cooling Equipment Summary

Make	
Trade	
Cond	
Coil	
AHRI ref	
Efficiency	0 SEER
Sensible cooling	0 Btuh
Latent cooling	0 Btuh
Total cooling	0 Btuh
Actual air flow	278 cfm
Air flow factor	0.047 cfm/Btuh
Static pressure	0 in H2O
Load sensible heat ratio	0.85

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



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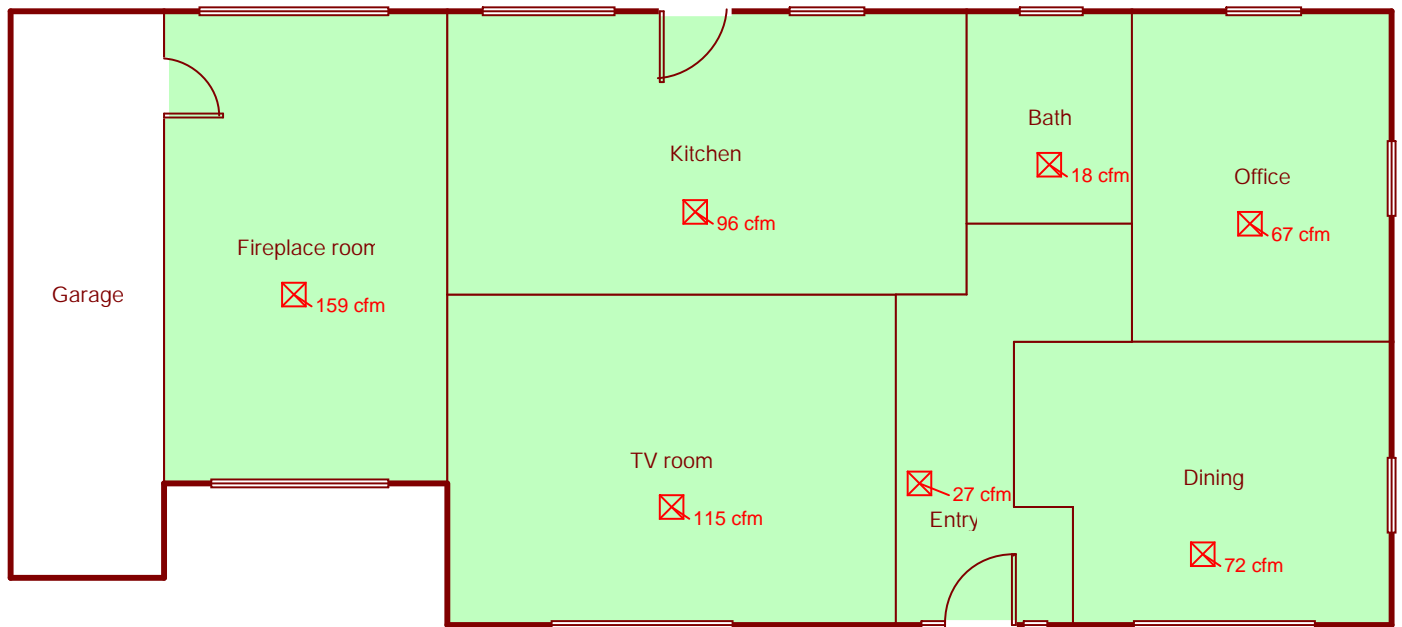
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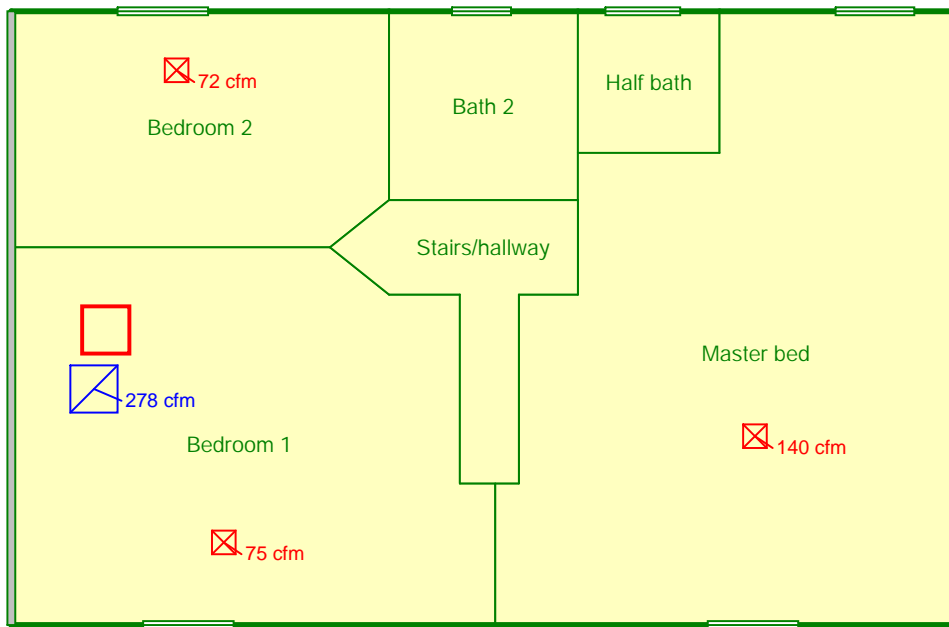
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